

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

				Complete if Known	
Application Number				10/502,351	
Filing Date				July 23, 2004	
First Named Inventor				Lian Hui ZHANG et al.	
Group Art Unit				Unknown 1652	
Examiner Name				Unknown IQBAL CHOWDHURY	
Confirmation No.				6085	
Sheet	1	of	4	Attorney Docket Number	2977-154

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³ Code	Number ⁴ Kind ⁵ (if known)		
QZ	AA	PCT	WO 01/98214 A1	NOVOZYMES BIOTECH INC.	12/27/2001

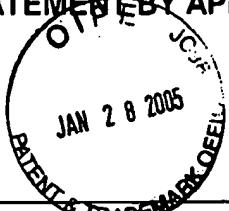
NON PATENT LITERATURE DOCUMENTS					
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QZ	AB	ALLISON et al., "Extracellular products as mediators of the formation and detachment of <i>Pseudomonas fluorescens</i> biofilms," FEMS Microbiol. Lett. 167:179-184, 1998.			
QZ	AC	BASSLER, et al., "Cross-species induction of luminescence in the quorum-sensing bacterium <i>Vibrio harveyi</i> ," J. Bacteriol. 179:4043-4045, 1997.			
QZ	AD	BECK von BODMAN et al., "Capsular polysaccharide biosynthesis and pathogenicity in <i>Erwinia stewartii</i> require induction by an N-acyl homoserine lactone autoinducer," J. Bacteriol. 177:5000-5008, 1995.			
QZ	AE	CAO et al., "Purification and structural identification of an autoinducer for the luminescence system of <i>Vibrio harveyi</i> ," J. Biol. Chem. 264:21670-21676, 1989.			
Examiner Signature	<i>Robert Chowdhury</i>			Date Considered	10/4/05

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<i>QZ</i>	AF	CHA et al., "Production of acyl-homoserine lactone quorum-sensing signals by gram-negative plant-associated bacteria," <i>Mol. Plant Microbe Interact.</i> 11:1119-1129, 1998.			
<i>QZ</i>	AG	COSTA et al., "Ecbl and EcbR: homologs of LuxL and LuxR affecting antibiotic and exoenzyme production by <i>Erwinia carotovora</i> subsp. <i>Betavasculorum</i> ," <i>Can. J. Microbiol.</i> 43:1164-1171, 1997.			
<i>QZ</i>	AH	DAUMY et al., "Role of protein subunits in <i>Proteus rettgeri</i> penicillin G acylase," <i>J. Bacteriol.</i> 163:1279-1281, 1985.			
<i>QZ</i>	AI	DAVIES et al., "The involvement of cell-to-cell signals in the development of a bacterial biofilm," <i>Science</i> 280:295-298, 1998.			
<i>QZ</i>	AJ	DONG et al., "AiiA, an enzyme that inactivates the acyl homoserine lactone quorum-sensing signal and attenuates the virulence of <i>Erwinia carotovora</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 97:3526-3531, 2000.			
<i>QZ</i>	AK	DONG et al., "Quenching quorum sensing-dependent bacterial infection by an N-acyl homoserine lactonase," <i>Nature</i> 411:813-817, 2001.			
<i>QZ</i>	AL	DUMENYO et al., "Genetic and physiological evidence for the production of N-acyl homoserine lactones by <i>Pseudomonas syringae</i> pv. <i>syringae</i> and other fluorescent plant pathogenic <i>Pseudomonas</i> species," <i>Eur. J. Plant Pathol.</i> 104:569-582, 1998.			
<i>QZ</i>	AM	DUNPHY et al., "A homoserine lactone autoinducer regulates virulence of an insect-pathogenic bacterium, <i>Xenorhabdus nematophilus</i> (Enterobacteriaceae)," <i>J. Bacteriol.</i> 179:5288-5291, 1997.			
<i>QZ</i>	AN	EBERHARD et al., "Structural identification of autoinducer of <i>Photobacterum fischeri</i> luciferase," <i>Biochemistry</i> 20:2444-2449, 1981.			
<i>QZ</i>	AO	EBERL et al., "Involvement of N-acyl-L-homoserine lactone autoinducers in controlling the multicellular behaviour of <i>Serratia liquefaciens</i> ," <i>Mol. Microbiol.</i> 20:127-136, 1996.			
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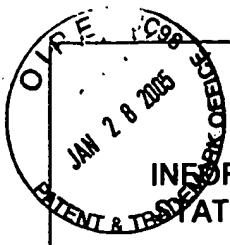
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<i>h</i>	AP	FUQUA et al., "Conserved cis-acting promoter elements are required for density-dependent transcription of <i>Agrobacterium tumefaciens</i> conjugal transfer genes," <i>J. Bacteriol.</i> 178:435-440, 1996.				
<i>h</i>	AQ	INOKOSHI et al., "Cloning and sequencing of the aculeacin A acylasae-encoding gene from <i>Actinoplanes utahensis</i> and expression in <i>Streptomyces lividans</i> ," <i>Gene</i> 119:29-35, 1992.				
<i>h</i>	AR	JONES et al., "The Lux autoinducer regulates the production of exoenzyme virulence determinants in <i>Erwinia carotovora</i> and <i>Pseudomonas aeruginosa</i> ," <i>EMBO J.</i> 12:2477-2482, 1993.				
<i>h</i>	AS	LEADBETTER et al., "Metabolism of acyl-homoserine lactone quorum sensing signals by <i>Variovorax paradoxus</i> ," <i>J. Bacteriol.</i> 182:6921-6926, 2000.				
<i>h</i>	AT	LEADBETTER, J.R., "Quieting the raucous crowd," <i>Nature</i> 411:748-749, 2001.				
<i>h</i>	AU	LEWENZA et al., "Quorum sensing in <i>Burkholderia cepacia</i> : identification of the LuxRI homologs CepRI," <i>J. Bacteriol.</i> 181:748-756, 1999.				
<i>h</i>	AV	MATSUDA et al., "Molecular cloning and structure of the gene for 7 β -(4-carboxybutanamido) cephalosporadic acid acylase from a <i>Pseudomonas</i> strain," <i>J. Bacteriol.</i> 163:1222-1228, 1985.				
<i>h</i>	AW	MATSUDA et al., "Nucleotide sequence of the genes for two distinct cephalosporin acylases from a <i>Pseudomonas</i> strain," <i>J. Bacteriol.</i> 169:5821-5826, 1987.				
<i>h</i>	AX	NASSER et al., "Characterization of the <i>Erwinia chrysanthemi</i> expl-expR locus directing the synthesis of two N-acyl-homoserine lactone signal molecules," <i>Mol. Microbiol.</i> 29:1391-1405, 1998.				
<i>h</i>	AY	PASSADOR et al., "Expression of <i>Pseudomonas aeruginosa</i> virulence genes requires cell-to-cell communication," <i>Science</i> 260:1127-1130, 1993.				
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hr	AZ	PEARSON et al., "Structure of the autoinducer required for expression of <i>Pseudomonas aeruginosa</i> virulence genes," Proc. Natl. Acad. Sci. USA 91:197-201, 1994.			
hr	BA	PIPER et al., "Conjugation factor of <i>Agrobacterium tumefaciens</i> regulates Ti plasmid transfer by autoinduction," Nature 362:448-450, 1993.			
hr	BB	PIRHONEN et al., "A small diffusible signal molecule is responsible for the global control of virulence and exoenzyme production in the plant pathogen <i>Erwinia carotovora</i> ," EMBO J. 12:2467-2476, 1993.			
hr	BC	SCHUMACHER et al., "Penicillin acylase from <i>E. Coli</i> : unique gene-protein relation," Nucleic Acids Res. 14:5713-5727, 1986.			
hr	BD	STASKAWICZ et al., "Molecular characterization of cloned avirulence genes from race 0 and race 1 of <i>Pseudomonas syringae</i> pv. <i>Glycinea</i> ," J. Bacteriol. 169:5789-5794, 1987.			
hr	BE	TAKESHIMA et al., "A deacylation enzyme for aculeacin A, a neutral lipopeptide antibiotic, from <i>Actinoplanes utahensis</i> : purification and characterization," J. Biochem. 105:606-610, 1989.			
hr	BF	VERHAERT et al., "Molecular cloning and analysis of the gene encoding the thermostable penicillin G acylase from <i>Alcaligenes faecalis</i> ," Appl. Env. Microbiol. 63:3412-3418, 1997.			
hr	BG	WHITE et al., "Genome Sequence of the Radioresistant Bacterium <i>Deinococcus Radiodurans R1</i> ," Science 286:1571-1577, 1999.			
hr	BH	ZHANG et al., "Agrobacterium conjugation and gene regulation by N-acyl-L-homoserine lactones," Nature 362:446-448, 1993.			
hr	BI	Swiss-Prot. Accession Q9RYQ4, WHITE et al., (two pages) (1999).			
hr	BJ	Embl Accession AE001836, WHITE et al., (ninety pages) (1999).			
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